

The Saving of Those Drawn to Death's Gates Beneath Water Is Now a Science

Thousands of Unwary or Unskilled Swimmers or Rowers Yearly Owe Their Lives to the Fact That Students of Various Methods of Rescuing and Resuscitating the Drowning Are Near By.

A dead well done, a life well won, is worth the praise of every one. THE yearly list of fatalities by drowning is so appalling in the United States, despite the brave corps of lifesavers doing duty at our bathing resorts, that there is evidently crying need of spreading among the public better knowledge of those simple rules of rescue and resuscitation, which will enable the great majority to cope adequately with the situation when present at an accident in the water. It is the only way by which the loss of life can be checked.

One cannot, indeed, but feel it a sad reflection on our country that the art of lifesaving has been so completely neglected among us, notwithstanding the rapidly growing popularity of all other branches of aquatic sports. It is an every day occurrence to find men and women priding themselves on their experience in and on the water, who are quite helpless when confronted with the task of going to the aid of one in danger or of caring for the apparently drowned. And this ignorance in people who have had every opportunity to fit themselves for the purpose is absolutely unpardonable.

Those in charge of the education of our boys and girls should deem it a duty to amend the deplorable state of affairs. Already the necessity of teaching swimming to the younger generation has made itself felt, and one by one our schools and colleges are making natation a compulsory part of their curriculum; but that is not enough. Quite as important, if not more so, is the establishment of lifesaving courses, which will enable all both to protect themselves and to help others when the occasion arises.

During the last winter a committee was

and ready way to subdue a frantic man in the water is to secure a hold from behind him. Aim, therefore, at coming upon him from the back, or at gaining this position without coming to a grapple. Either splash water in his face as soon as you are near enough, which will generally make him turn away, or watch for an opportunity and swing him around yourself. A simple and effective way is to lunge unexpectedly for his wrist (Fig. 1), and, with a sudden, outward movement, spin him about, throwing your free arm around his neck (Fig. 2). Once you have him thus you can, if he is submissive, grasp him by the hair or the neck of his suit (Fig. 14), and, with a quick pull toward you, start him floating face up, when you throw yourself gently backward, and proceed to tow him in this position, or by swimming with your unhindered arm and the legs.

or fight place one hand on either side of his head (Fig. 18), near the jaw, and hold him firmly, or seize him by the arms above the elbows (Fig. 16), with your palms up, using your legs to propel yourself. If very unruly, better pass your arms under his (always from behind, of course), drawing him into a close embrace (Fig. 17) and pressing your hands on his chest. If this seems insufficient and you fear he may break away and prove dangerous, shift your hands from his chest to his head, without removing your arms from under his, and force his head forward, locking your legs around his (Fig. 19) and waiting until he has quieted down before attempting to carry him further. This method is drastic, however, and should not be used except in extreme cases.

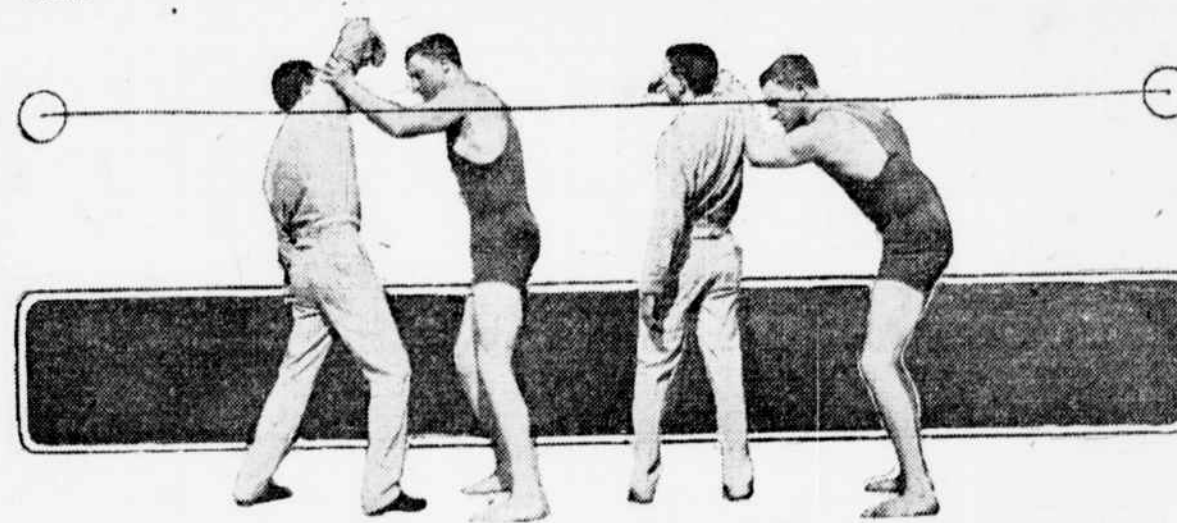
"When you are called to the aid of one who has sunk, look around for bubbles—



SECURING A BACK HOLD ON A STRUGGLING PERSON.

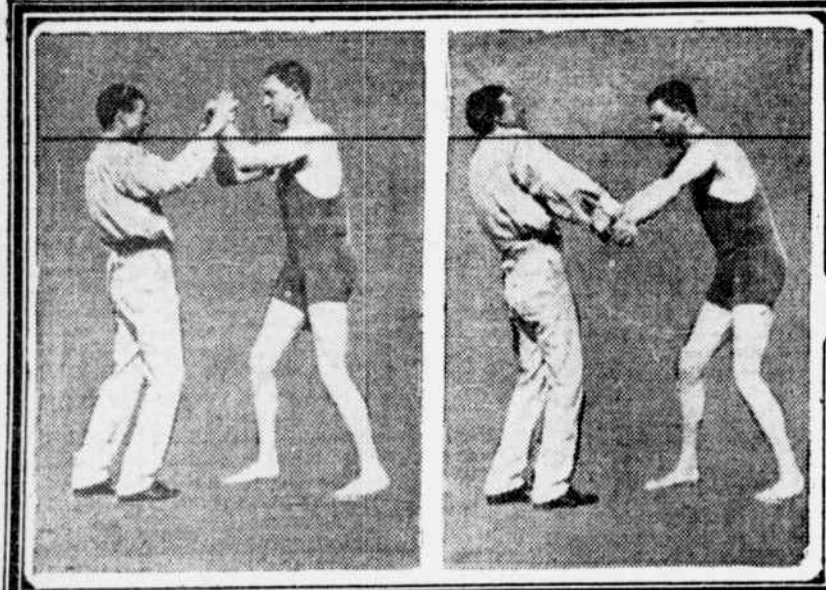
Fig. 1—Lunge unexpectedly for his wrist and with a sudden outward sweep of the arm spin him about.

Fig. 2—Then throw your free arm around his neck and you have him at your mercy.



ELUDING THE GRIP OF A FRANTIC DROWNING PERSON.

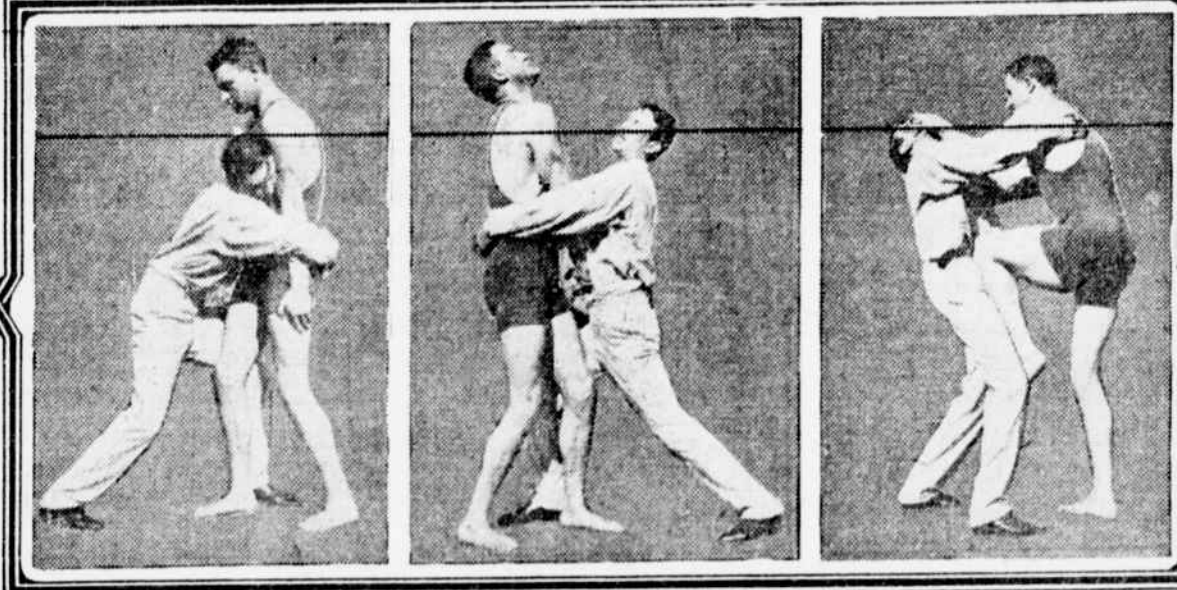
Figs. 3 and 4—As the drowning person raises the arm to grab you, place hand squarely under his armpit, push yourself under water, turning outwardly from him, and with a quick jerk turn him around so, that you are behind him, then come to the surface and get a secure hold from the rear.



BREAKING A WRIST HOLD.

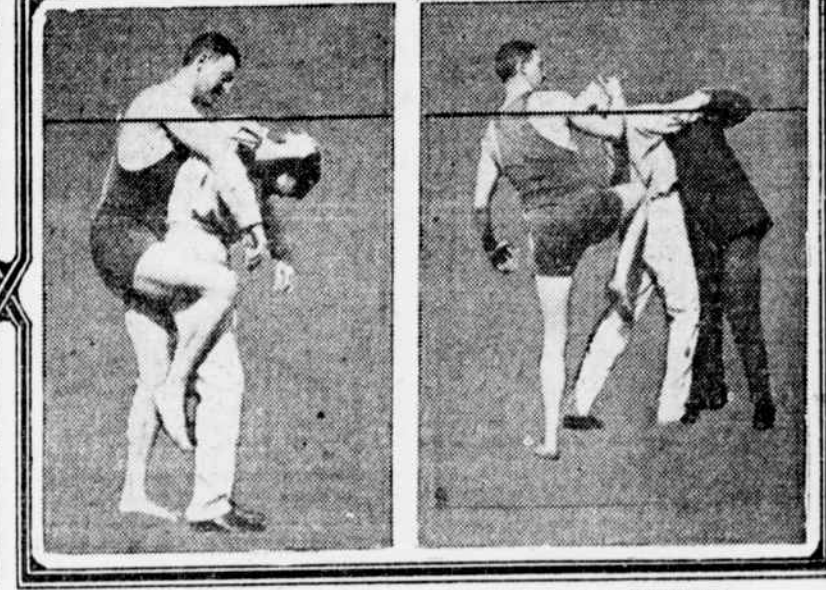
Fig. 5—When seized by the wrists, thus:

Fig. 6—Shoot the hands together, then twist them outward with a quick motion, and it will generally free you.



BREAKING A BODY HOLD.

Figs. 7, 8 and 9—If caught below the elbows, jerk both your shoulders suddenly forward toward your victim's face. This will loosen his grip. Now lean back, withdrawing the arms upward, as shown, and proceed.

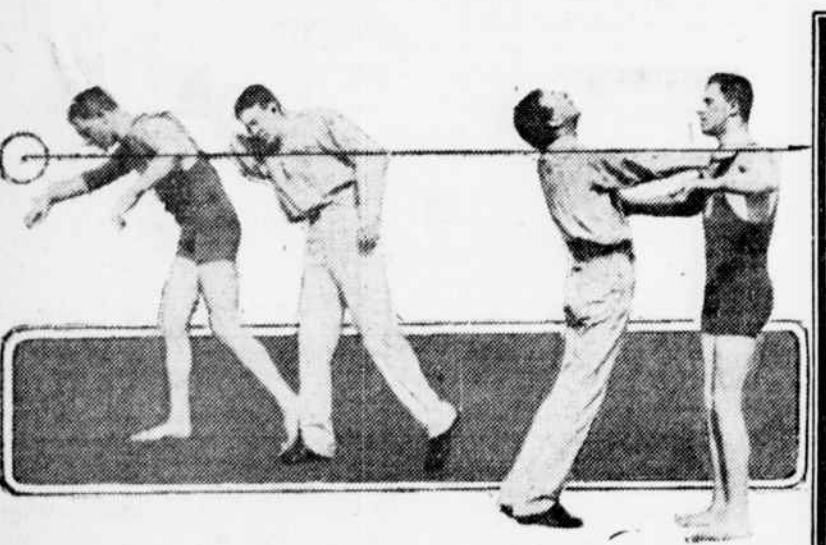


SUBDUING A VIOLENT VICTIM FROM BEHIND.

Fig. 10—When sufficiently quiet proceed.

AIDING A RESCUER.

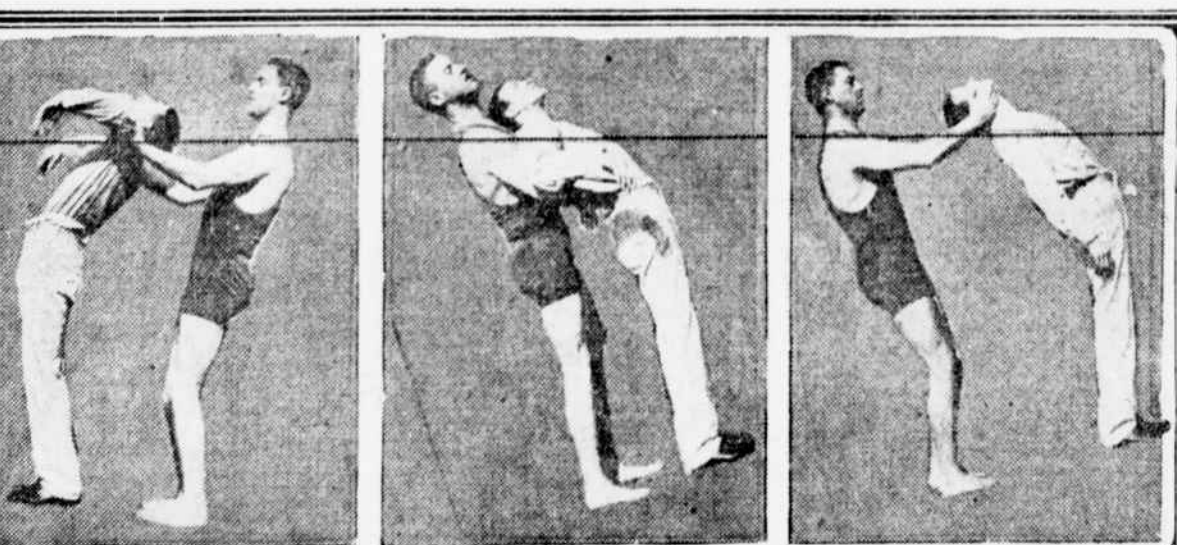
Fig. 11—If a rescuer or another victim has been caught in a body hold, approach the most violent from behind, place knee on his back and hand under his chin, throwing him back until he releases his grasp.



HELPING THE EXHAUSTED CONSCIOUS SWIMMER.

Fig. 12—Make an exhausted swimmer, who is still conscious, place his hand on your shoulder, then tow him in.

Fig. 13—Let him lie on his back with both hands on your shoulder, then use the breast stroke.



RESCUING THE FIGHTING VICTIM.

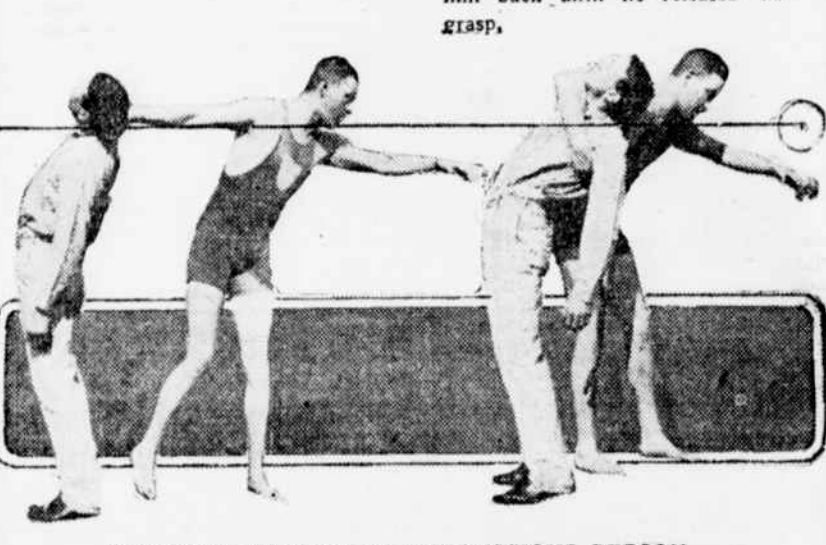
Always get a fighting person from behind and swing on the back.

Fig. 16—Excited victim: Either take hold of both arms above the elbow—

Fig. 17—Or pass your hands under his arms and press him against you—

Fig. 18—Or seize him on either side of the head.

In either of these holds he cannot turn to lay hands on you and you can propel yourself by using the legs.



CARRYING ASHORE AN UNCONSCIOUS PERSON.

Fig. 14—Seize hold of the victim by the hair or back of the head near the neck and tow him in on his back.

Fig. 15—Another way is to place arm around his chest; elbow over shoulder, hand under armpit and carry him.

appointed by the American Life Saving Society to look into the methods in use at home and in foreign countries, with the object in view of ascertaining their relative merits, drawing from each its best features, and then drafting a set of rules to be adopted by the society as its standard. There served on the committee prominent swimmers, water polo players, lifesavers and medical authorities, who contributed to the good cause their valuable experience in the various lines, and the result was the formulation of a code, modern, simple and complete, which promises to allow even the mediocre swimmer to tackle a rescue successfully and without fear of ill consequences, while fitting any one who reads it attentively for the proper handling of the victim of a drowning accident.

Let us take first the line of conduct prescribed when going to the aid of those in danger, as worded in the code. Here are the instructions given:

"If you are dressed and see any one in difficulty in the water, begin at once, without hesitation, to remove your outer clothing. Take off first your coat and vest, then your shoes, tie and collar. Thus ready, try to familiarize yourself at a glance with existing conditions, noting whether the water is still or running, where you can best make a landing on the return, what assistance you may count upon in case of need, and so on, deciding quickly on a plan of action.

"As soon as you become convinced that the person is really in danger jump immediately into the water, entering carefully, with a shallow dive if head first, to avoid striking should there be submerged obstructions. On coming to the surface strike out with easy, well timed strokes, conserving your energy, and keep your eyes constantly on the victim, that you may know where to search for him if he sinks before you reach him. This is particularly important in running water, when it is advisable, if the man disappears, to go directly to the spot where he was last seen, plunge under water and swim with the current. The prevalent custom of taking up the search from below the mark, against stream, is not the right one. Besides its being hard and exhausting to breast a current, you may lose valuable time if the body travels faster than you estimated, or is caught and held.

"On coming within range of one who is struggling violently or shows signs of panic do not close in rashly; act warily. And bear in mind always that the only safe

they are usually seen—and if the water is still they indicate the exact location of the body, directly beneath. Dive down at an angle on reaching the spot, starting a few feet away from the bubbles, and if you fail in your first attempt try a spiral plunge next, as you may otherwise overshoot the mark and become confused. In running or tidal water the bubbles will arise further down the current than the body lies, so dive from well above them, as already told, and swim with the stream.

"When you find your man below the surface, seize him by the hair, the clothing near the neck, or pass your hand under his chin. If you are on the bottom and the footing is free and solid, push off from it with a good upward spring, and then help your rise with the unnumbered arm and legs; but if the bottom is reedy or soft don't attempt to push from it or you may get caught.

"In towing the rescued ashore never exhaust yourself by trying to breast a strong current, or to cut it in a straight line; many lives have been lost this way. Take no chances. Just swim easily across the running water, meeting it diagonally, and seek the first landing place you can. Similarly, if you are caught in an outsetting tide at the seashore, or in a bad undertow, don't play yourself out in battling against them. It is far wiser to retain your strength, merely supporting your charge with head above water and awaiting the help which is likely to come at any mo-



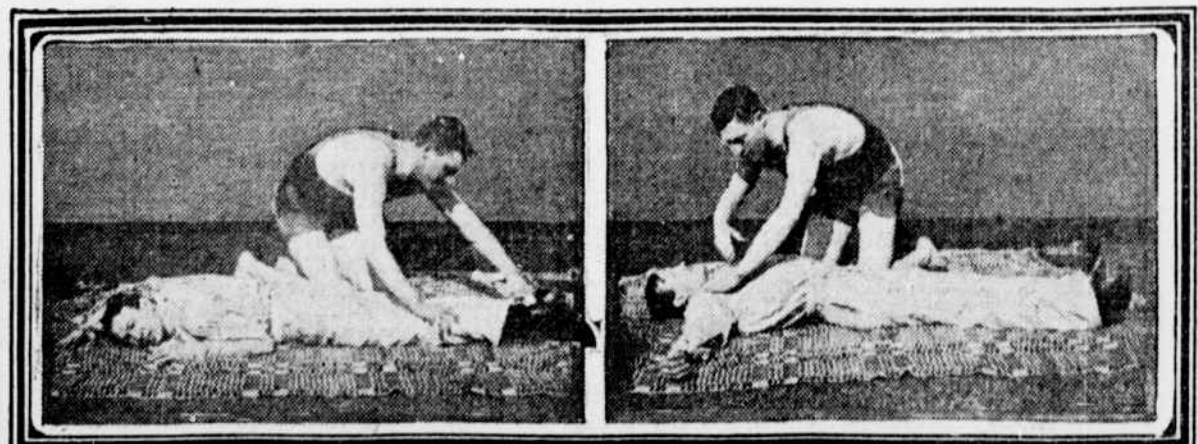
SCHAEFER METHOD OF RESUSCITATION (Fig. 20)

A—Expelling the foul air and clearing the air passages of mucus, etc.



SCHAEFER METHOD OF RESUSCITATION (Fig. 21)

B—Getting fresh air into the lungs by a quick release of the lower ribs.



RESTORING CIRCULATION AND WARMTH BY FRICTIONAL MASSAGE.

Figs. 22 and 23—This must not be attempted until the victim is conscious and breathing fairly well.

ment in the shape of a lifeline or boat.

"The belief generally held that drowning people soon lose control over themselves, and cannot, unaided, make their way toward you, so that by approaching them carefully you should be able to avoid being seized by them.

"It happens frequently, however, that through miscalculation or accident, you find yourself so close to a struggling man that he can throw his arms about your neck, or

body. A means has been devised of eluding his efforts before you are caught. As he puts out his arm thrust your open palm under it, near the armpit, so as to have his arms resting in the curve between your index and thumb, duck your head (Fig. 3); allow yourself to sink; twist your body forward (Fig. 4); then thrust his body forward, over you, and come quickly to the surface, when you will find yourself behind him, in position to secure any or

ing on the mouth and squeezing the nostrils together, so as to close completely both breathing channels. This shutting off of the air supply is in most cases sufficient to make the drowning man clutch at your hand and release you, but with a powerful antagonist it is advisable to bring up the bent knee, resting it against his body, ready to facilitate a breakaway in case of necessity.

"Throughout the rescue it is helpful to speak quietly encouraging and reassuring words, if your ward is conscious, telling him what is being done ashore to bring assistance, how near he is to safety and so on. This always has a steady, calming effect."

So much for the actual work in taking the victim from the water.

And now we come to the question of how to care for the patient after landing on terra firma. Before touching on the rules to follow it may help a thorough understanding of the subject to devote a few lines to the physiology of resuscitation and to the various known methods of producing artificial respiration.

The work of resuscitation to be thorough must have an object, first, to free the stomach and air passages from water and mucus; second, to force all the vitiated air possible from the lungs; third, to replace the foul gases with pure air that will properly oxygenate the blood; fourth, to induce this oxygenated blood to circulate and reach the heart; fifth, to restore natural respiration.

Open mouth wide, and, if foul with mucus or foreign matter, clean with hand or cloth. Stand across body, facing the head, and pass your arms around the waist until your hands meet over the left side, interlocking the fingers in order to grasp the stomach between your palms. Force out the water by raising the body from the middle, at the same time pressing the hands together. Knead inward and upward under the ribs from the left side toward the center. Press for four seconds, then relax, endeavoring to grasp more and more of the stomach pouch, until water ceases flowing from the mouth.

"Place a small roll of clothing, a pillow or like support, beneath the victim at the stomach. Turn his head to windward. Crook his arm on the side opposite the face. Rest the head in the bend of this arm. Leave face free to the wind.

"Kneel over the patient, still facing the head, with one leg on each side of the body. Rest your open hands on his back, thumbs near the spine, at the height of his elbows, fingers spread over the lower ribs. Throw yourself forward, weight on your arms, and with steady, increasing pressure force out the foul air from the lungs (Fig. 20). After four seconds straighten up quickly (Fig. 21), releasing the ribs, so that they will spring back into place. Bend over again immediately to press for four seconds more, then straighten. Continue this treatment until signs of life begin to appear.

"Twelve to fifteen respiratory acts to the minute, according to the size of the patient. The larger the victim the more forcible and sustained should be the pressure and slower the action.

"If you should have an assistant, let him keep the mouth open and clean while you operate. He may also help by tickling the patient's nostrils with a feather, or passing smelling salts under his nostrils.

"Should these stimulants fail to take effect it may aid matters to slip an elastic band around the tongue of the subject. As you release pressure the assistant draws the tongue out; as you apply it he lets it slip back. In this way the air passage is gradually cleared through expulsion of the mucus from the throat.

"If, as soon as natural breathing sets in, strip the patient of all wet clothing, cover the upper body with something warm and dry, and start rubbing the limbs toward the extremities, then toward the heart, that is, in applying friction to the legs

Continued on seventh page.